

MAIL TO:

STATE OF UTAH
DIVISION OF PURCHASING
3150 STATE OFFICE BUILDING, CAPITOL HILL
P.O. BOX 141061
SALT LAKE CITY, UTAH 84114-1061
TELEPHONE (801) 538-3026
www.purchasing.utah.gov

Invitation to BidSolicitation Number: **FV6043**Due Date: **11/16/05 at 2:00 PM**

Date Sent: October 13, 2005

Goods and services to be purchased: **ALUMINUM HULLED, JET DRIVEN PATROL/RESCUE BOAT****Please complete**

Company Name		Federal Tax Identification Number	
Ordering Address	City	State	Zip Code
Remittance Address (if different from ordering address)	City	State	Zip Code
Type <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government	Company Contact Person		
Telephone Number (include area code)	Fax Number (include area code)		
Company's Internet Web Address	Email Address		
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)		
<p>The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, and specifications. <u>Please review all documents carefully before completing.</u></p> <p>The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes _____ No _____. If no, enter where produced, etc. _____</p>			
Offeror's Authorized Representative's Signature		Date	
Type or Print Name		Position or Title	

STATE OF UTAH
DIVISION OF PURCHASING

Invitation to Bid

Solicitation Number: **FV6043**

Due Date: **11/16/05@2:00pm**

Vendor Name:

Item#	Qty	Unit	Description	Unit Price	Extension
001	1	EA	ALUMINUM HULLED, JET DRIVEN PATROL/RESCUE BOAT PER ATTACHED SPECIFICATIONS. CONTACT DAVE HARRIS AT 801-538-7341 WITH QUESTIONS REGARDING SPECIFICATIONS. THE BIDDER MUST COMPLETE THE FREIGHT SECTION ON THEIR BID. ALSO, THE FOLLOWING ITEMS ARE REQUIRED TO BE RETURNED WITH YOUR BID. 1) COMPLETED BID PRICING 2) DETAILED AND ITEMIZED PRICE LIST 3) SPECIFICATION/PRODUCT BROCHURES, PICTURES, ETC. 4) COMPLETED BID ASSURANCE PAGE 5) COMPLETE & DETAILED EXCEPTIONS LIST	\$	\$

FOR INFORMATION REGARDING PURCHASING, CONTACT FRANK VOLK AT 801-538-3707.

Changes or modifications to this bid:

Any changes or modifications to this solicitation will only be accomplished in written addendum sent from the division of purchasing.

Any other form is not binding. Bidders submitting a bid on any information other than which is contained in this solicitation document, or any addendum thereto, do so at their own risk.

Ship To: **SALT LAKE CITY UTAH 84116**

FREIGHT CHARGES (if applicable)

SHIPPING POINT AND ZIP CODE	
<input type="checkbox"/> SHIPPING WEIGHT	
MODE OF TRANSPORTATION (Please check one) <input type="checkbox"/> Small package/Ground <input type="checkbox"/> LTL(Less than truck load) <input type="checkbox"/> Truckload <input type="checkbox"/> Air <input type="checkbox"/> Other (Please specify) NMFC Class# _____ NMFC Item # _____	
TOTAL PRICE LESS FREIGHT (FOB Origin)	\$
TOTAL PRICE INCLUDING FREIGHT (FOB Destination)	\$

INVITATION TO BID - INSTRUCTION AND GENERAL PROVISIONS

1. BID PREPARATION: (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. Errors may be crossed out and corrections printed in ink or typewritten adjacent and must be initialed in ink by person signing quotation. (c) Unit price will govern, if there is an error in the extension. (d) Delivery time is critical and must be adhered to as specified. (e) Wherever in this document an item is defined by using a trade name of a manufacturer and/or model number, it is intended that the words, "or equivalent" apply. "Or equivalent" means any other brand that is equal in use, quality, economy and performance to the brand listed as determined by the Division of Purchasing & General Services (DIVISION). If the vendor lists a trade name and/or catalog number in the bid, the DIVISION will assume the item meets the specifications unless the bid clearly states it is an alternate, and describes specifically how it differs from the item specified. All bids must include complete manufacturer's descriptive literature if quoting an equivalent product. All products are to be of new, unused condition, unless otherwise requested in this solicitation. (f) By signing the bid the vendor certifies that all of the information provided is accurate, that they are willing and able to furnish the item(s) specified, and that prices quoted are correct. (g) This bid may not be withdrawn for a period of 60 days from bid due date.

2. SUBMITTING THE BID: (a) The bid must be signed in ink, sealed in a properly addressed envelope, and delivered to the DIVISION OF PURCHASING (DIVISION), 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061 by the "Due Date and Time." **The "Bid Number" and "Due Date" must appear on the outside of the envelope.** (b) Bids, modifications, or corrections received after the closing time on the "Due Date" will be considered late and handled in accordance with the Utah Procurement Rules, section R33-3-109. (c) **Your bid will be considered only if it is submitted on the forms provided by the state. Facsimile transmission of bids to DIVISION will not be considered.** (d) All prices quoted must be both F.O.B. Origin per paragraph 1.(c) and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the bid for consideration and approval by the DIVISION. Upon award of the contract, the shipping terms will be F.O.B. Destination with all transportation and handling charges paid by the Contractor, unless otherwise specified by the DIVISION.

3. SOLICITATION AMENDMENTS: All changes to this solicitation will be made through written addendum only. Bidders are cautioned not to consider verbal modifications.

4. PROPRIETARY INFORMATION: Suppliers are required to mark any specific information contained in their bid which is not to be disclosed to the public or used for purposes other than the evaluation of the bid. Each request for nondisclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any bid will not to be considered proprietary. Bids submitted may to be reviewed and evaluated by any persons at the discretion of the state.

5. SAMPLES: Samples of item(s) specified in this bid, when required by DIVISION, must to be furnished free of charge to DIVISION. Any item not destroyed by tests may, upon request made at the time the sample is furnished, to be returned at the bidder's expense.

6. WARRANTY: The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

7. DIVISION APPROVAL: Purchase orders placed, or contracts written, with the state of Utah, as a result of this bid, will not to be legally binding without the written approval of the director of the DIVISION.

8. AWARD OF CONTRACT: (a) the contract will to be awarded with reasonable promptness, by written notice, to the lowest responsible bidder that meets the specifications. Consideration will to be given to the quality of the product(s) to be supplied, conformity to the specifications, the purpose for which required, delivery time required, discount terms and other criteria set forth in this invitation to bid. (b) The bids are opened publicly in the presence of one or more witnesses. the name of each bidder, and the amount of the bid is recorded. Each bid, and the record, is open to public inspection. (c) The DIVISION may accept any item or group of items, or overall low bid. the DIVISION has the right to cancel this invitation to bid at any time prior to the award of contract. (d) The DIVISION can reject any and all bids. And it can waive any informality, or technicality in any bid received, if the DIVISION believes it would serve the best interest of the State. (e) Before, or after, the award of a contract the DIVISION has the right to inspect the bidder's premises and all business records to determine the holder's ability to meet contract requirements. (f) DIVISION does not guarantee to make any purchase under awarded contract(s). Estimated quantities are for bidding purposes only, and not to be interpreted as a guarantee to purchase any amount. (g) Utah has a reciprocal preference law which will to be applied against bidders bidding products or services produced in states which discriminate against Utah products. For details see Section 63-56-404 and 63-56-405, Utah Code Annotated. (h) Bid tabulations and awards are posted under "Vendor Info" at www.purchasing.utah.gov. (i) Multiple contracts may be awarded if the State determines it would be in its best interest.

9. ANTI-DISCRIMINATION ACT: The bidder agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also bidder agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.

10. DEBARMENT: The CONTRACTOR certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the CONTRACTOR cannot certify this statement, attach a written explanation for review by the STATE.

11. ENERGY CONSERVATION AND RECYCLED PRODUCTS: The contractor is encouraged to offer Energy Star certified products or products that meet FEMP (Federal Energy Management Program) standards for energy consumption. The State of Utah also encourages contractors to offer products that are produced with recycled materials, where appropriate, unless otherwise requested in this solicitation.

12. GOVERNING LAWS AND REGULATIONS: All state purchases are subject to the Utah Procurement Code, Title 63 Chapter 56 U.C.A. 1953, as amended, and the Procurement Regulations as adopted by the Utah State Procurement Policy Board. These are available on the Internet at www.purchasing.utah.gov.

(Revision 5 Oct 2005 - ITB Instructions)

**STATE OF UTAH
DIVISION
OF PARKS AND RECREATION**

(10/12/2005)

Bid Specification

For

Aluminum Hull Patrol Vessel

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*****END OF SECTION*****

A-GENERAL DESCRIPTION:

- A-1** It is the intent of this specification to describe an aluminum hulled vessel, complete with trailer, suitable to perform Law Enforcement, Search and Rescue Patrol functions in and on the Green and Colorado Rivers and the lakes of the State of Utah. The vessel and trailer configuration, balance and construction must be stable and maneuverable at all speeds in various wind, water, depth or wave conditions which are normally encountered on the rivers and waterways of the State of Utah. These conditions will vary from “flat” to 2’-4’ waves from boating traffic and other river and weather conditions. Specifications and requirements listed shall be strictly adhered to, with any and all exceptions listed on a separate enclosure consistent with section **B-9** (Bid Specifications) of this document. The following requirements listed within this section are general in specification. This bid is for an all welded aluminum construction vessel to be forward console with aluminum semi-hard top with open construction walk around inboard or forward engine.
- A-2** It is intended that the bidder, when selecting components, material, and design practices for the specified vessel, will use those, which are the best available in the industry for the type of operation and conditions for which the vessel will be subjected. All components, materials and design practices will be selected to give maximum performance, service life and safety and do not merely reflect the minimum requirements of this specification.
- A-3** The Term “**heavy duty**” as used in these specifications **shall** mean that the item to which the term is applied **shall** exceed the usual quantity, quality or capacity supplied with the standard production unit(s) and **shall** be able to withstand unusual strain, exposure, temperature, wear and use.
- A-4** Vessel **shall** be constructed of “new” marine grade aluminum and designed for both **Flat-Water River, White Water River** and **Lake** patrol functions.
- A-5** The length of this vessel **shall** be a minimum **twenty-two feet (22’)** and a maximum of **twenty-four feet (24’)**. The centerline length will be measured from the furthest point on the bow portion of the hull to the transom down the center of the vessel and **shall not** include the swim/dive platform.
- A-6** The hull design **shall** be hard chine semi-vee.
- A-7** General construction **shall** be considered a **white water style**.

*****END OF PAGE*****

A- GENERAL DESCRIPTION (CON'T.):

- A-8** Propulsion *shall* be accomplished utilizing a marine gas engine complete with water jet propulsion unit equipped with a stainless steel impeller.
- A-9** A walk through console with steering/helm and control functions in the center section of the vessel.
- A-10** The vessel and trailer must be constructed to withstand normal patrol use during the spring, summer and fall of 40-60 hours per week, and 10-30 hours per week in the winter

*****END OF SECTION*****

B-BID REQUIREMENTS:

- B-1** Bids must include all cost of the finished vessel including labor, materials, and all other costs for a completely operational vessel upon receipt. The bid **shall** include any and all sales taxes and Dept. of Motor Vehicle registration fees.
- B-2** All work done, when and where governed, must comply with current USCG, NMMA, BIA, ABYC Regulations and the Rules and Laws of the State of Utah.
- B-3** All equipment and accessories, where applicable, **shall** be UL Marine listed.
- B-4** Complete specifications, published literature and photos or illustrations of the unit proposed **shall** be furnished with the bid.
- B-5** The successful bidder must be a recognized manufacturer of heavy aluminum watercraft who has been in business continuously for a minimum of 24 months to the bid opening date.
- B-6** All equipment and components listed, as standard by the manufacturer for the model quoted **shall** be furnished whether or not such items are detailed herein. (e.g. special wrenches, tool kits, jacks adequate to safely lift the vessel when loaded to rated capacity, etc.)
- B-7** Specifications of the following pages are written with the intent to meet all applicable documents but the final certification to comply **shall** rest with the vender and not the State of Utah Division of Parks and Recreation. Should requirements as specified not comply, the successful bidder is required to refigure and revise the specifications to meet all laws, rules and regulations where it applies to items such as ratings of the axles, tires, rims, brakes, batteries, cooling capacity, etc. and the State of Utah Division of Parks and Recreation is to be notified thereof.
- B-8** The purchaser **will not** accept any part, component or system, which is not an established standard product of the bidding manufacturer (e.g. “prototypes”, “experimental”, etc.)
- B-9** The bidder **shall** list on a separate sheet, any variations from or exceptions to the conditions, requirements or specifications of this document. This sheet will be labeled **“Exceptions to bid Conditions and Specifications”** and **shall** be attached to the bid form. It is not the intent of these specifications to restrict a manufacturer’s ingenuity in design or to conflict with standard marine construction practices.

***** END OF PAGE*****

B-BID REQUIREMENTS (CON'T.):

B-10 Warranties will include:

<i>Engine and Pump/IO</i>	<i>= full manufacturer's warranty = engine and jet mount shall be warranted against failure</i>
<i>Hull</i>	<i>= minimum 10 years on materials and workmanship With a further limited lifetime hull warranty to the original owner the State of Utah</i>
<i>Semi-Hardtop And light bar arch</i>	<i>= constructed to be able to withstand vibrations and flexing and warranted against breaking and cracking for 10 years</i>
<i>Equipment and accessories</i>	<i>= Manufacturer's warranty or Utah Laws</i>
<i>Trailer and accessories</i>	<i>= shall be covered by a 2 year warranty</i>
<i>Trailer axles</i>	<i>= covered by a five year warranty</i>

B-11 An appointed representative of the State of Utah Division of Parks and Recreation will have advance notice from the successful bidder of various stages of construction.

B-12 The successful bidder **shall** deliver the completed vessel and trailer to a location designated by the State of Utah Division of Parks and Recreation and **shall** provide a minimum of one (8) hours of operation and maintenance instruction for the designated park personnel. FOB Salt Lake City UT 84116

B-13 Owner/operator and service manuals **shall** accompany the vessel and trailer upon delivery.

B-13.1 Two (2) operator's manuals.

B-13.2 Two (2) complete service and repair manuals for the vessel including engine and jet propulsion unit.

B-13.3 Two (2) complete parts manuals for the vessel including engine and jet propulsion unit.

B-14 The original dealer's Report of Sale along with a certified Weight Certificate **shall** be furnished to the consignee at the time of delivery of the vessel.

*****END OF PAGE*****

B-BID REQUIREMENTS (CON'T.):

- B-15** The successful bidder shall have one hundred (100) calendar days to build and deliver the completed Patrol vessel. The 100 days shall begin on the date the electronic purchase order is sent to the successful bidder from the State of Utah.
- B-15-1** There shall be a penalty assessed for each calendar day beyond the agreed 100 days that the vessel is not delivered to the purchaser the State of Utah Division of Parks and Recreation.
- B-15.2** The penalty shall be \$250 per day deducted from the awarded bid price for each calendar day the boat delivery is delayed from the agreed upon date or any subsequent written agreements between the successful bidder and the State of Utah Division of Parks and Recreation. Not including the actual date the vessel is delivered.
- B-15.3** If the State of Utah Division of Parks and Recreation order changes during the construction of the vessel, then the successful bidder, in addition to pricing, has the right to revise the delivery schedule as part of the change order, only to the extent made necessary by compliance with the requested change.
- B-16** No changes to the specifications shall be made without written agreement between the successful bidder and the State of Utah Division of Parks and Recreation that specifies the change and the cost or credit involved. Changes to the delivery date must be included in the written change order or the delivery date will remain unaffected.
- B-17** The successful bidder shall allow the State of Utah Division of Parks and Recreation representatives to have full access to the boat during all phases of construction and testing to ensure compliance with workmanship and specifications.
- B-18** Any portion of the work, if found defective, shall be corrected at the expense of the successful bidder.

All bids shall show the vessels base price, listing what equipment is included in this price. The State of Utah Division of Parks and Recreation at its discretion may eliminate any item or option when awarding the bid; or cancel the entire bid request.

*****END OF SECTION*****

C-GENERAL DESIGN AND CONSTRUCTION REQUIRMENTS:

Dimensions Propulsion and Related Machinery

Centerline length:	22ft to 24ft measured down centerline of boat excluding full width swim/dive platform
Beam:	8.6 ft. minimum
Bottom Width:	6.5ft minimum
Approximate Weight:	5,000lbs
Draft:	Actual draft 10” capable of operation in 4” of water
Transom Height:	30” minimum
Side Height:	30” minimum
Fuel Capacity:	120 gal minimum preferred two (2) tanks in bilge area
Engine:	Preferred New Mercury 496 MAG HO 8.1L 425hp(EFI) gasoline engine or approved equal Chevrolet 8.1L multi port fuel injected engine with a minimum 425 hp. Equal engine must be <u>Approved By Division Maintenance shop Supervisor</u> Engine must meet all marine industry requirements.
Propulsion Drive:	Hamilton 212 w/turbo 4.0 turbo impeller w/stainless steel impeller
Emergency Kicker Engine:	T8hp Yamaha high Thrust T8PXH
Hull Design:	At least 10degree dead rise at transom 17 degree at bow constant 12 degree to 14 degree planning surface 11 degree constant dead rise

*****END OF PAGE*****

C-GENERAL DESIGN AND CONSTRUCTION REQUIREMENTS (CON'T.):

Hull Construction

- C-1** The material and equipment used shall be new. All aluminum shall be welded no rivets. The hull shall be constructed of heavy duty, high-grade marine alloy and shall meet the appropriate Federal and Industry standards for material and installation.
- C-1.1** Aluminum thickness, all aluminum shall be marine grade:
- | | |
|--------------------------|--|
| Side gage: | 1/8" minimum H116-5086 |
| Transom: | 1/4" minimum H116-5086 |
| Bottom: | 1/4" minimum H116-5086 |
| Floors and Deck | 1/8" 6061 Diamond plate with sound deadening under floor, and non-glare surface |
| Keel: | Heavy duty HD extruded keel protector strips or equivalent |
| Clines: | Best for boat, minimum Heavy-duty HD cline caps angle extrusion minimum 3/16"x1 1/2"x 1 1/2" |
| Stringers and bulkheads: | Best for boat |
- C-2** Hull shall be semi-vee in design with minimum center line length of **twenty-two (22')** and maximum center line of **twenty-four (24')**. (excluding dive platform).
- C-3** The bottom Vee shall have a dead rise of between **twelve** and **fourteen** degrees at the planning surface and **eleven** degree constant rise, except for the intake shoe and transition forward of the flat intake shoe, which must meet manufacturer's specifications.
- C-4** All fasteners utilized in construction of, or attachment to this vessel shall be aluminum or 300 series stainless steel and consistent with standard marine construction practices. If bidder uses stainless steel, the fasteners shall be insulated from aluminum.
- C-5** All hull frame stiffener connections shall be welded continuously inside and outside on all seams. Riveted connections shall not be considered acceptable.

END OF PAGE

C-GENERAL DESIGN AND CONSTRUCTION REQUIREMENTS (CON'T.):

- C-6** The hull will be assembled using a shaped and slotted formed extrusion between the sides and the bottom (chine) and the sides and the top (gunwale and foredeck) or an assembly, system of equal and approved design. All welds are to be continuous, both inside and outside the hull.
- C-7** Heavy-duty bow chock shall be securely welded to the hull.
- C-8** The bottom will be hard chine. The bottom width shall be between seventy-eight and eighty-four inches (74"-84").
- C-9** The gunwale top section shall be approximately eight (8) inches wide.
- C-10** The sides (gunwales) shall be thirty to thirty-six inches (30"-36") in height.
- C-11** The beam width shall be a minimum of ninety-eight inches (98").
- C-12** Two (2) 5/8" minimum heavy duty HD welded bow eyes three inches (3") apart and two (2) 5/8" minimum heavy duty HD stern eyes, one welded to each side of the transom suitable for use in towing.
- C-13** An aluminum rub rail shall run from bow to transom on each side.
- C-14** A minimum of three inch (3") and a maximum of six inch (6") high, schedule 40 1 1/4" O.D. aluminum handrail shall be installed on top of the gunwale on each side. It shall go from the stern a minimum of two feet along the gunwale. It will go from the aft corners across the transom a minimum of 18"
- C-15** There shall be the same type handrail along each side of the bow, beginning at the Front windshield on each side. This rail shall include an opening at the extreme bow area for persons boarding the vessel.
- C-16** This handrail will be welded or through-bolted with backing plates to the gunwale.
- C-17** A total of six (6) ten inch (10") heavy duty, open based cleats will be mounted on the gunwale three (3) on each side. These cleats will be welded or through-bolted with backing plates.

*****END OF PAGE*****

C-GENERAL CONSTRUCTION REQUIREMENTS (CON'T.):

- C-18** There shall be a stern mounted movable electric hoist/lifting system or crab davit type system capable of extending two feet (2') over sides with a minimum weight limit of 500lbs. To lift injured individuals or equipment from the water capable of being erected on either the port or starboard side of stern. There shall also be a storage spot for the lift system when not in use in the vessel.
- C-19** Front window system shall be a three-window system. Pilot's window center to be of lamiglas, starboard and port windows of lexan glass or better-tempered glass and all front windshield glass is to be tinted.
- C-19.1** Front window will have extra strong welded frame walk through on right and left windows.
- C-19.2** Right and left window's accesses will be 42" tall.
- C-19.3** All other windows will be welded construction with full support braces, glass will be safety glass at a minimum.
- C-20** A swim platform/pump protector is to run the full length of the transom and be constructed of a minimum of 1.5" aluminum tubing. The platform will be covered with .250" (1/4") diamond plating, extending a minimum of twenty-four inches (24") behind the transom.
- C-20.1** The platform will be located as close to the water line as practical.
- C-20.2** A twelve-inch (12") long handrail will be attached vertically to one side of the dive platform to assist divers to climb out of the water.
- C-20.3** There shall be a removable ladder with three steps attached to the dive platform and located on the same side as the handrail this ladder will also be capable of being used on the bow to assist in boarding when needed Storage will be along the side of the vessel.
- C-20.4** All above items shall be done in such a way as to assist a swimmer or diver out of the water in the safest manner possible.
- C-21** All bulkhead doors and hatch covers will be framed with one inch (1") aluminum alloy channel.

*****END OF PAGE*****

C-GENERAL CONSTRUCTION REQUIREMENTS (CON'T.):

- C-22** Attached horizontal to the exterior of the gunwale shall be a heavy-duty HD black rubber rub-rail, from the transom to the area of the side windows (where the sides begin to curve towards the bow. The rub-rail shall be approx. eighteen inches (18") below the top of the sides.
- C-23** The exterior shall be painted from the top of the gunwale to the waterline. (Including the semi-hardtop). The color shall be an off white to be approved by the State of Utah Division of Parks and Recreation. The waterline on down shall be covered with a clear coat. Paint used will be a zolatone paint or better quality paint.
- C-24** A reflective "**STATE PARK RANGER**" shall be attached centered mid-ship on each exterior side. It shall be centered vertically in the painted area between the gunwale and rub-rail. The word "**STATE PARK RANGER**" shall also be attached across the transom centered vertically and horizontally above the dive platform. The letters shall be between ten and twelve inches (10"-12") in height. The letters shall be Black in color. The letters shall be in capital and block font.
- C-25** An aluminum "Tow Bit" shall be welded to the centerline at the transom. The bit shall be removable. It shall be capable of towing large vessels without undue stress.
- C-26** A heavy duty HD aluminum tube light bar arch shall be either welded or bolted to the top of the gunwales. The top of the arch shall be a flat metal platform. The arch platform will accommodate a light bar; two (2) remote spotlights, a flood light, radio antenna and GPS antenna/puck. The arch shall be mounted as far forward on the gunwales as practical but behind the eyebrow of the semi-hard top and painted the same color as the exterior of the vessel.
- C-26.1** The forward vertical support tube shall slant back toward the rear. The rear support tube may be either vertical or slant toward the rear.
- C26.2** The bottom of the horizontal frame shall be no more than two (2) inches above the semi-hard top.
- C-27** Two moveable flood lights/work lights shall be mounted on the back of the semi-hard top to illuminate the work area and sides of the boat.

*****END OF SECTION*****

D-ELECTRICAL REQUIREMENTS:

- D-1** All hoses, wires and pipes shall be routed to be clear of all heat sources and shall be routed, secured, or otherwise protected from any present or potential source of snags, abrasions or sharp edges.
- D-2** All wiring shall be protected from corrosion.
- D-3** Two dual heavy-duty HD marine 27 batteries or equal shall be installed, with a minimum of 615 cold cranking amps and heavy-duty cables. To be installed in battery boxes.
- D-3.1** Batteries shall be secured inside the engine compartment (or isolated in a separate compartment), electronically isolated from the hull and easily accessible.
- D-3.2** All batteries, bilge pumps and fuel filters are to be contained inside the engine compartment and mounted in such a way as to be readily and easily accessible for service, upon opening the engine compartment.
- D-4** A single heavy duty battery selector switch shall be installed and include four (4) positions: “1, 2, both and off”.
- D-4.1** The switch shall be easily accessible in a locked compartment.
- D-5** Minimum #6 gauge cable from batteries to dash. One twelve (12) position fuse block is to be mounted under the operator’s console, wired directly to the batteries. Each fuse will be labeled for identification.
- D-5.1** A minimum of four (4) re-settable breakers fuses/circuits shall be installed at the console for future electronic needs. one 10 amp, one 15 amp, two 40 amp.
- D-6** The following gauges and meters, at a minimum, are to be installed in the console:
- *Multi-function speedometer (with speed, trip, time, fuel, and battery voltage)
 - *Multi-function tachometer (with RPM, Trim angle, oil level and over heat warning)
 - *Water pressure gauge 0-30lbs
 - *Hour meter
 - *Fuel management gauge (with fuel contamination warning, fuel consumption for port, starboard or both in GPH, fuel economy in MPG and total fuel consumption in gallons)
 - *fuel filter/water separator with alarm

*****END OF PAGE*****

D-ELECTRICAL REQUIREMENTS (CON'T.):

- D-7** All gauges/meters will be illuminated with an on off switch at the console.
- D-8** There shall be a minimum of two (2) Heavy-duty bilge pumps 1,500gph with dual controls manual and automatic or better.
- D-9** Five (5), twelve (12) volt power outlets
- D-9.1** One (1) in center console
- D-9.2** One (1) inside of semi-hard top near back inside of each gunwale
- D-9.3** One (1) inside each gunwale near the transom.
- D-10** Navigational lighting shall be provided and comply with international navigational rules, and shall be marine grade and USCG approved switches shall be on console.
- D-11** Heavy-duty HD Electric bilge blower of appropriate size shall be installed switch on console, along with natural ventilation.
- D-12** Two flush mounted docking lights, one on each side of the bow with switch in console.
- D-13** Minimum of three (3) deck lights (courtesy lights), mounted so as to illuminate the deck, one to illuminate the console area and one to illuminate the engine compartment.
- D-14** Two (2) adjustable flood lights to illuminate work area of boat and sides of boat located on rear starboard and port side of semi-hard top.
- D-15** Three (3) Pantograph windshield wipers for pilot and passenger windows switch on operators console.
- D-16** Heavy Duty HD heater/defroster with minimum four adjustable outlets or equivalent for passenger heating and or window defrosting shall be provided with controls on the operators' console.
- D-17** Light bar arch will have full diameter available, with pull wires, to accommodate wiring lights and electronics. The Division Maintenance shop shall mount all emergency equipment. Except rear semi-hard top floodlights.
- D-18** All switches shall be located on operators console.

*****END OF SECTION*****

E-INTERIOR REQUIREMENTS:

- E-1** There shall be no exposed cables or, hoses or wires at the transom or along the sides except when the engine compartment is open.
- E-2** The bow area in front of the windshield shall be an open deck configuration with and recessed self-draining/self bailing scuppers, made of non-slip 6061 1/8" diamond tread plate aluminum non-glare surface. There shall be a single lockable storage compartment (anchor locker) in the extreme bow.
- E-3** All interior sides shall be spray coated with a spray in bed liner and be a haze or off white color.
- E-4** There will be a minimum amount of black trim and no teak or other exposed wood shall be used in the vessel trim or finish.
- E-5** All compartments shall be locking, keyed alike with recessed half circle pull rings or handles.
- E-6** Floatation material shall be installed to fill the voids between the deck and hull.
- E-7** Deck surface shall be constructed of 6061 1/8" diamond tread plate non-skid surface and non-glare.
- E-8** The aluminum engine cover is to be thoroughly insulated against excessive noise. The sound deadening material shall be fire retardant.
 - E-8.1** Dimensions for the engine cover shall be agreed upon by the successful bidder and the Utah State Division of Parks and Recreation.
 - E-8.2** Noise level shall not exceed 88dB(A) in accordance with SAE J2005. For engines manufactured on or after January 1, 1993, noise level of 88dB(A) when subjected to a stationary sound level test as prescribed by test SAE J2005. Standards and testing shall be done by the successful bidder under closed as well as open hatch conditions. Mufflers shall be installed.
 - E-8.3** When operated the vessel shall not exceed 75dB(A) measured as specified in test SAE J1970. Provided, that such measurement shall not preclude a stationary sound level test as prescribed by SAE J2005
 - E-8.3** The cover will be hinged for total engine access. The cover will open aft and balance over the center. Cover shall be removable for maintenance other than normal operator service.

*****END OF PAGE*****

E-INTERIOR REQUIREMENTS (CON'T.):

- E-8.4** A Gray marine grade vinyl-covered padding shall be installed on the engine cover. The sides of the engine cover shall be covered with gray marine carpet. There shall also be a total of two tie down points on each side to hold backboards or other similar items in place.
- E-8.5** There shall be gas cylinders or a prop to hold the engine cover in the open position.
- E-9** A single operators console shall be provided and include a dashboard area behind the windshield.
- E-9.1** The console shall have a locking storage compartment.
- E-10** There shall be a lockable radio/electronics box mounted under the semi-hard top above the command console large enough to accommodate the controls for a police radio, siren, and emergency lights. Size to be about 2.5ft x 2.5ft.
- *** Any variations on **E-10** shall be at the approval of the Utah Division of Parks and Recreation. All controls shall be mounted either as described or mounted flush in the operators' console.
- E-11** Passenger and helm seats shall be high quality, durable, minimum spring air adjustable seats bucket-design, with extra padding. All seats and benches shall be a Gray color.
- E-11.1** Seats and armrests shall be wide enough to accommodate a large person wearing a gun belt and related equipment.
- E-11.2** Seats shall be capable of swivel operation and be adjustable horizontally and vertically. The right and left passenger seats must be removable or capable of being positioned so as to allow access through the window entrance by personnel moving a backboard.
- E-11.3** All interior shall be alike, including the same color, which will be off White or Gray in color. Utah Division of Parks and Recreation may approve a two tone design, with the primary color being off white.

*****END OF PAGE*****

E-INTERIOR REQUIREMENTS (CON'T.):

- E-12** Two (2) padded bench seats; one on the port and one on the starboard side, directly behind the passenger seats shall be provided and installed. The bench seats shall be mounted on watertight lockable storage boxes and shall be a minimum of sixty (60) inches in length. The bench seats are to be adjustable to a bed. The backrest shall be a pad bolted to the gunwale. The pad shall be approximately four (4) inches wide and shall be the same width as the bench seat. Access for the storage boxes shall be through a lift up lid. The storage area on the starboard side shall be fitted out as a long gun (rifle/shot gun) storage area.
- E-13** There shall be storage trays were possible on the inside gunwales of both the port and starboard sides, from the transom to the cockpit. These trays will allow for maximum storage that the hull design can allow. Each storage area shall be sectioned off and have a lockable door.
- E-14** A floor storage area will be created between the bench seats this also will be lockable.
- E-15** Helm shall be located in the center of the vessel cockpit and consist of an adjustable three (3) spoke, cushioned grip wheel with a minimum diameter of 11.5" and a maximum diameter of 13.5".
- E.15.1** Throttle and controls shall be "Teleflex" heavy duty or equivalent. Throttle and shift shall be dual controls mounted on console.
- E-16** Vessel shall be equipped with a dash-operated horn.
- E-17** Window frame and semi-hard top shall be padded on all exposed angles all around to protect against head injury.
- E-18** Two (2) marine rated fire extinguishers one forward in cockpit area one in stern area.
- E-19** Boating foam/noise package throughout vessel shall be fire retardant.
- E-20** Semi-Hard top with soft back drop curtain 6'4" height from floor to top support braces. Hand grab rails on inside top and outside top of hardtop. As well as storage around the inside of top of the semi hard top.

*****END OF SECTION*****

F-PROPULSION AND RELATED MACHINERY REQUIREMENTS:

- F-1** The successful bidder will be responsible for purchasing, mounting and aligning engines and jet pump. All accessories, gauges, controls as well as guaranteeing their optimal performance.
- F-1.1** The engine shall be a new Mercury 496 MAG HO RPM range 4600-5000 425hp. gasoline fuel injected marine engine, or an approved equal Chevrolet 8.1L, 425hp multi port fuel injected marine engine. Engine must meet all marine industry requirements. *Alternate engine must be approved by the Utah Division of Parks and Recreation maintenance shop supervisor.* Specifications and engine design for alternate engine must be submitted.
- F-1.2** Engine mount shall be heavy-duty HD around engine and jet and shall be warranted against failure. In addition the engine shall be strapped down. This is mandatory on the engine to prevent engine from moving forward into cockpit area in an accident.
- F-1.3** Provide fresh water-cooling with self-winterizing raw water system, heat exchangers as required, including a KSL heavy-duty HD sand trap type debris filter or better quality. The Green and Colorado are heavily debris laden especially in spring with silt and other material.
- F-1.4** Provide heavy-duty HD oil cooler heat exchange
- F-1.5** Provide a remote oil filter location suitable for ease of maintenance.
- F-1.6** There shall be access to drain the oil, including a hose attached to the engine to facilitate the draining of oil.
- F-1.7** Alternator shall be rated for anticipated electrical load at idle engine RPM. Unit shall maintain all electrical systems while engine is at idle to simulate patrol operations in all visibility conditions.
- F-1.8** Engine shall be capable of back flushing the intake for the jet propulsion unit.
- F-1.9** Engine shall have quick disconnect fuel lines.

*****END OF PAGE*****

F-PROPULSION AND RELATED MACHINERY REQUIREMENTS (CON'T.):

F-2 Kicker motor shall be furnished by contractor and mounted preferred is High Thrust T8hp Yamaha any other engine must be better or equal and approved by the Utah Division of Parks and Recreation Maintenance Shop Supervisor.

F-2.1 Kicker motor shall have quick disconnect fuel lines to main fuel tanks.

F-3 Engine shall meet required engine exhaust limitations at 50'.

F-3.1 Exhaust must be muffled to below 88dB(A).

F3.2 All sound deadening materials used shall be of fire retardant material.

F-4 A tank configuration of two tanks in the bilge area of the vessel shall be used. Fuel tanks in any case shall be positioned to enhance stability of the vessel. Any other design or single tank must be approved.

F4.1 Tanks shall be fabricated of marine grade aluminum.

F-4.2 Tanks shall have minimum capacity of 120 U.S. gallons.

F-4.3 Tanks shall be pressure tested and certified.

F-4.4 Tanks shall meet or exceed all Federal and Utah fuel tank requirements.

F-4.5 Fuel fill inlets shall be located on the gunwales.

F-4.6 Fill inlets shall include a key lock gas cap.

F-4.7 Fuel system shall include a duplex, heavy-duty HD marine fuel/water separator/filter.

*****END OF PAGE*****

F-PROPULSION AND RELATED MACHINERY REQUIREMENTS (CON'T.):

F-5 The water jet propulsion shall be a “Hamilton 212, 4.0 Turbo” with stainless steel impeller or approved equivalent.

F-5.1 The jet shall have the capability to operate in shallow water , 4” to 6” maximum in depth for extended periods of time without fouling or sustaining wear or damage.

F-5.2 The unit shall have a clean-out port on the pump intake to allow debris to be removed while vessel is in the water. The clean-out shall be accessible from the inside while the vessel is afloat.

F-5.3 There shall be a further stomp grate for removing debris from the jet intake.

F-6 All equipment shall be in compliance with BIA, NMMA, USCG and Utah regulations and standards that are applicable to the length of vessel. All equipment and accessories where applicable, shall be UL Marine listed.

*****END OF SECTION*****

G-SEMI-HARD TOP AND CANVAS COVERING REQUIREMENTS:

- G-1** The Semi-Hard Top shall have an eyebrow area over the operators station that shall be covered by a removable canvas covering. Window area on port and starboard sides shall be safety glass that shall be capable of being opened. The semi-hard top shall extend from the windshield excluding the eyebrow to aft of the bench seats by a minimum of six (6”).
- G-2** There will be a rear drop curtain that extends from the top of the floor. The curtain will be attached to the top and the side by snaps or other similar attachments. There shall be a zippered door from the deck to just below the top. There will be a strap/snap system to allow the rear curtain to be rolled up while still attached to the top.
- G-3** There **shall** be a camper extension that will cover the rear portion of the vessel with removable sides that can be used when vessel is under way.
- G-4** The vessel **shall** have a stern cover and towing bra for when vessel is not in operation or is under tow.
- G-4.1** All canvas shall be designed and tailored to be able to withstand damage at speeds of 65m.p.h.
- G-5** The canvas portions shall come with a storage boot for protection when not in use.
- G-6** The rear door area and sides and rear curtains shall be constructed of a combination of canvas and clear plastic as to allow 360 degree visibility with minimal obstruction.
- G-7** All snaps, hinges and other hardware used shall be 300 series stainless steel. All zippers shall be heavy-duty HD metal.
- G-8** All canvas shall be a gray in color unless approved by the Utah Division of Parks and Recreation. All Canvas shall be heavy-duty HD marine grade “Sunbrella”, or equivalent as approved by the Utah Division of Parks and Recreation.

***** END OF SECTION*****

H-TRAILER REQUIREMENTS:

- H-1** The trailer shall be welded steel with tandem axles to accommodate the size and weight of the specified vessel, fully fueled and equipped.
- H-2** The trailer shall be “bunk” style. Roller style shall not be considered. Bunks shall be adjustable.
- H-3** Trailer shall be unpainted, galvanized metal.
- H-4** Tires shall be radial of a size and ply rating to accommodate the gross weight of the vessel fully loaded. The wheels will be a minimum of fourteen (14”) inches. There will be a matching spare tire and wheel which shall be attached to the trailer with a key lock mount.
- H-14.1** Wheels shall be equipped with “Bearing Buddies” or approved equal.
- H-5** Trailer tongue shall be equipped with a 2 5/16” ball hitch.
- H-6** Fenders shall be included and fabricated of a material strong enough to be used as steps for boarding the vessel while trailored.
- H-7** A “Fulton” swing away, or approved equal tongue jack with solid rubber wheel shall be included. Jack shall be rated to exceed the tongue weight of the loaded vessel.
- H-8** The trailer shall be equipped with heavy-duty winch with nylon strap. The winch shall be attached to the trailer with security bolts.
- H-9** Trailer shall have welded side bunks to assist in recovering the vessel.
- H-10** Trailer shall be equipped with “surge” type brakes on all four (4) wheels.
- H-11** The trailer shall have installed light and wiring system, two submersible eight function taillights. Four all plastic casing non-corrosive side marking lights. All plastic casing non-corrosive 16 gage double insulated marine wire right and left side operating independently of each other. Four-way vehicle connector.
- H-12** Bunks shall be UHMW plastic full four (4”) inches wide bolted with 3/8” stainless steel bolts.
- H-13** The trailer shall meet Federal and S.A.E. requirements.
- H-14** The trailer weight rating shall exceed the weight of the vessel, fully fueled and loaded.

END OF SECTION

BIDDER ASSURANCES

I guarantee that the boat contained in my companies bid will meet all of the specifications and requirements contained within the document **UTAH BOAT SPECIFICATIONS (08/20/2005)** unless the exceptions are otherwise noted in my bid according to Chapter **B-BID RQUIREMENTS** Section **B-9**.

Bidder:_____

Signature:_____

Print or Typed Name:_____

Title:_____